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NEWS LETTER

Issued by
The Maryland Vegetable growers' Association
W. R. Ballard,
Secretary-Treasurer.

Vol XX. No. 1. College Park, Maryland January, 1943

The Annual Meeting. The annual sessions were well attended and the discussions at times were quite lively. Problems of fertilizer and other supplies, labor, machinery, and governmental restrictions came in for thorough airing. One of the most critical problems was the curtailment of vine crops and the difficulty of finding suitable substitutes for these crops. A committee with J. E. Andrews of Hurlock as Chairman, and Dr. C. H. Mahoney as secretary was appointed to present the case to authorities in Washington to effect, if possible, an easing of the difficulty.

The afternoon session was given over to the Horticultural Council at which were representatives of various horticultural groups. The fertilizer situation, and questions relating to packages, truck and farm machinery, and the War Manpower unit of production for vegetables and fruit came in for their share of the discussion.

Due to the press of business the report of the nominating committee was crowded out. Their report is as follows:

President — H. Clay Whiteford, Whiteford, Maryland.
Vice-President — J. E. Andrews, Hurlock, Maryland.
Secretary-Treasurer — W. R. Ballard, College Park, Maryland.
Director for Farm Bureau — George H. Stratmann, Sparrows Point, Maryland.
Delegate to Farm Bureau — Egbert Hawkins, Harmans, Maryland.

If no objections are raised these will be considered the officers for 1943.

George H. Stratmann as Chairman of the auditing committee reports that the treasurer's books are in order and show a balance in hand as of December 31st, 1942 of \$69.24.

The following resolutions were presented by the resolutions committee and were formally adopted:

Growers of so-called non-essential crops will cooperate with the government request to shift to essential crops. Such shifts must be made with full recognition of the market situation. Tomato canning houses do not have the labor or the facilities for handling large increases in tomato production, soy-bean crushing facilities are inadequate to take care of the 1942 crop and other outlets are equally handicapped in handling increases.

Growers of non-essential crops can go only so far in shifting to essential crops without causing serious losses because of inadequate marketing facilities. It must be recognized that the production of some "non-essential" crops is necessary to the most efficient management of farms and to the best use of labor. Without them there would be gaps in the planting and harvesting operations that could not be effectively filled. Growers are forced by circumstances to produce a considerable quantity of the "non-essential" crops. In light of this situation, the drastic reduction in the nitrogen content of the fertilizers and the forced shift to organic nitrogen rather than chemical nitrogen means added inefficiencies on these farms. The land and labor will produce less food than they normally would. It is requested that every effort be made by those in authority to grant these growers fertilizers that will allow their operation to produce food effectively.

Furthermore, the conditions outlined above should be recognized by selective service boards in considering the deferment of farm labor. If growers of non-essential crops have shown responsible cooperation with the government's request in light of the market situation, they should not be penalized by the removal of their already inadequate labor supplies.

We are in agreement with the anti-inflation policy of the government, yet the major factor in vegetable production is labor and not knowing how much these labor costs may increase, it is most important that the administration bear this fact in mind. Otherwise, with the various types of control measures being put in the path of production of these crops they may easily discourage the needed additional acreages of vegetables. A good price is essential to encourage this production, therefore the public can well expect to pay higher prices for their produce.

The potato and vegetable show was not quite as large as usual, but was more extensive than anticipated under the prevailing conditions.

Select or Order Seed Potatoes Now. Potato growers should make arrangements immediately for securing seed stock to plant their 1943 allotments. Most home grown seed potato seed stocks are severely infected or totally destroyed by Late Blight rot. Home grown seed stock should be examined for the presence of Late Blight rot which can be recognized by the presence of dark sunken areas on the surface. Tubers showing evidence of Late Blight rot, no matter how small the infection, are not fit for seed. Tubers showing no evidence of infection may be safely planted even if they are found among blighted tubers.

The Irish Cobbler and Katahdin varieties are recommended for early planting. The Katahdin matures ten days to two weeks later than the Irish Cobbler and both varieties should be planted where it is desirable to prolong the digging time.

The Sequoia variety is most suitable for late plantings, especially for commercial production, but for home use the Dakota Red is preferred by many because of its excellent cooking quality. The Katahdin is also suitable for late planting, but does not yield as well as the Sequoia.

Potato growers should be especially careful to avoid the purchase of uncertified seed. Uncertified seed is usually grown in fields which were disqualified for certification on account of the presence of diseases. Ring rot,

one of the diseases for which fields are frequently disqualified is especially dangerous. It rots the tubers at digging time, in transit and in storage, and when severe may result in very severe or total loss of the crop.

Orders for certified seed should be placed as soon as possible. Information regarding the location of desirable seed sources can be obtained from your County Agent or from Dr. R. A. Jehle, Specialist in Plant Pathology, University of Maryland, College Park, Maryland.

Since the Association must depend upon the dues of \$1.00 per year to meet expenses, and since the State Fair Board has ruled that dues may not be retained from the prize money awarded at the Show, the Treasurer will soon be in an embarrassing situation unless the members keep their dues paid up voluntarily. A few persons have already sent in their dollar, but your early response will be appreciated. Expenses involved include \$20.00 to the Farm Bureau, \$10.00 to the N. E. Potato and Vegetable Council, and necessary expenses for stationery and postage.

THIRTEENTH ANNUAL MARYLAND VEGETABLE SHOW

Lord Baltimore Hotel, Baltimore, Maryland, January 12, 13, 14, 1943

Sponsored by the

Maryland Farm Bureau Federation and Maryland Vegetable Growers Association

REGULATIONS

No entry fee will be charged. Since this show is sponsored by the Maryland Vegetable Growers Association, all exhibitors should become members. Members will receive all reports issued by the association which will include a monthly news letter and the annual proceedings. Members will also receive a certificate of membership containing the name and address of the exhibitor which will be placed on each exhibit for identification and advertising.

Exhibits may be entered only by the grower and owner of the crop. Only one exhibit may be entered in any class.

Exhibits should be sent by prepaid express or parcel post to the State Vegetable Show, Lord Baltimore Hotel, c/o Dr. R. A. Jehle or Mr. W. R. Ballard, Baltimore, Maryland, and should arrive not later than January 12th. Judging will begin at 10:00 A.M. on January 13th, so it is necessary to have the exhibits at the hotel before that time.

Arrangements for the return of the exhibits must be made by the exhibitors; otherwise, the exhibits will be disposed of by the Maryland Vegetable Growers Association.

White and Sweet Potatoes

Each exhibit shall consist of sixteen (16) potatoes.

Group I - Adult Certified

Open to all potato growers in Maryland who have produced seed potatoes eligible for certification. Exhibits must be selected from potatoes grown in fields which have passed all certification requirements of the Maryland Seed Certification Board in the field inspections.

	<u>Premiums</u>
Class I. Irish Cobbler	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class II. Sequoia	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class III Any Other Variety. Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00; and 6th. \$1.00
Class IV. Sweet Potatoes, Any Variety Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00

Group II - Adult - Commercial

Open to all potato growers in Maryland.

Class V.	Irish Cobbler	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class VI.	Sequoia	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class VII.	Smooth Rural	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class VIII.	Russet Rural	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class IX.	Dakota Red.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class X.	Any Other Variety Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00; 6th. \$1.00
Class XI.	Sweet Potatoes, Maryland Golden Sweet	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00; and 6th. \$1.00
Class XII.	Sweet Potatoes - Any Other Variety, Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00

Group III - 4-H Club Certified and Commercial

Open to all 4-H Club members listed in the State Office who had potatoes for their project.

Class XIII.	Early Varieties (Irish Cobbler, Warba, Bliss Triumph, etc.) Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00; and 6th. \$1.00
Class XIV.	Medium Late Varieties (Green Mountain, Katahdin, Chippewa, etc.) Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00 4th. \$1.50; 5th. \$1.00; and 6th. \$1.00
Class XV.	Late Varieties (Rurals, Dakota Red, Sequoia, etc.) Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00; 4th. \$1.50; 5th. \$1.00; and 6th. \$1.00

GROUP IV - F. F. A. Certified and Commercial

Open to all F. F. A. members who have potatoes for their project.

		Premiums
Class XVI.	Early Varieties (Irish Cobbler, Warba, Bliss Triumph, etc.) Variety must be designated	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class XVII.	Medium Late Varieties (Green Mountain, Katal din Chippewa, etc.) Variety must be designated	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00
Class XVIII.	Late Varieties (Rurals, Dakota Red, Sequoia, etc.) Variety must be designated	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00 4th. \$1.50; 5th. \$1.00; 6th. \$1.00

Group V - 4-H or F. F. A. Certified or Commercial

		Premiums
Class XIX.	Sweet Potatoes, Any variety, Variety must be designated.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00 4th. \$1.50; 5th. \$1.00 and 6th. \$1.00

VEGETABLES

		Premiums
Class XX	Best 3 heads cabbage, Flathead type	1st. \$4.00, 2nd. \$3.00; 3rd. \$2.00.
Class XXI	Best 3 heads cabbage, Ballhead type	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00
Class XXII.	Best 16 yellow onions	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00.
Class XXIII	Best 12 carrots, any var.	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00.
Class XXIV	Best 12 parsnips	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00.
Class XXV	Best 16 turnips	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00.
Class XXVI	Best 3 Hubbard Squash, any type	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00.
Class XXVII	Best 3 three pound baskets of mushrooms	1st. \$4.00; 2nd. \$3.00; 3rd. \$2.00.

ANNUAL MEETING OF
MARYLAND VEGETABLE GROWERS ASSOCIATION

Wednesday, January 13, 1943.

9:30 A.M. Call to Order, - - - - - President H. J. W. Rayner.

Discussion

What Can be Grown in the Place of the Vine Crops for
Which no Chemical Nitrogen Can be Used in 1943?

Can Tomatoes be grown on Light Soils With the Ferti-
lizer Ratios Now Available?

The 1943 Insecticide and Fungicide Situation for Truck
Crops.

What is the Package Situation for Truck Crops for
1943?

The 1943 Production Goals for Truck Crops.

Report of Committees.

Recess

2:00 P.M.

Horticultural Council (Joint Meeting)

F. Ridgely Todd, Chairman.

Discussion

The 1943 Fertilizer Situation: What it Means to Growers
and Their Production Practices.

The Drastic Curtailment of Vine Crop Production in 1943.
What Can Growers Do to Meet This Situation?

The Package Situation - - - - - L. C. Carey.

The Truck and Farm Machinery Situation.

The Man Power Unit of Production for Vegetables and
Fruit.

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The Way Man Power Unit of Production for Vegetables and
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Group 4 - F. F. A. Certified and Commercial

Open to all F. F. A. members who have potatoes for their project.

Premiums

- | | |
|------------------------------------|--|
| Class XVII. Early Varieties | 1st. \$3.00; 2nd. \$2.00; 3rd. \$1.50; |
| (Irish Cobbler, Warba, Bliss | 4th. \$1.00; 5th. \$1.00; and 6th. Ribbon. |
| Triumph, etc.) | |
| Variety must be designated. | |
| Class XVIII. Medium Late Varieties | 1st. \$3.00; 2nd. \$2.00; 3rd. \$1.50; |
| (Green Mountain, Katahdin, | 4th. \$1.00; 5th. \$1.00; and 6th. Ribbon. |
| Chippewa, etc.) | |
| Variety must be designated. | |
| Class XIX. Late Varieties | 1st. \$3.00; 2nd. \$2.00; 3rd. \$1.50; |
| (Rurals, Dakota Red, Up to | 4th. \$1.00; 5th. \$1.00; and 6th. Ribbon. |
| Date, etc.) | |
| Variety must be designated. | |
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NEWS LETTER

Issued by

The Maryland Vegetable Growers' Association
W. R. Ballard,
Secretary-Treasurer,

Vol. XX. No. 2

College Park, Maryland

February, 1943

Troubles Multiply. It appears quite certain that growers will have difficulties securing sufficient new containers for marketing their crops this season. Manufacturers have their problems -- lumber, nails, and labor supplies. Growers will be well advised to lay in their stock of containers as early in the season as possible. It will be better to buy good used containers than to wait too long for new containers which may not be obtainable. One advantage of buying used containers early is that this will relieve storage facilities none too plentiful for storing this sort of material. While normally used containers are discriminated against in the markets, it is quite likely that this year dealers will be glad to take most anything that will hold together. Look out for your needs early and don't expect the government to do too much for you.

Victory Garden Fertilizer. Manufacturers are putting out a 3-8-7 mixture under the name of Victory Garden Fertilizer. War Production Board order No. M-231 required manufacturers to limit the chemical nitrogen to one-half percent, the 2-1/2 percent to be made up from organic sources. Order No. 5 which went into effect January, 18, 1943 places no restrictions on the use of chemical nitrogen for the Victory Garden Fertilizer. The nitrogen may now consist of all chemical nitrogen, all organic, or any combination of the two.

It is understood that farm gardens are not restricted to the use of the Victory Garden Fertilizer, but may use whatever they may have on hand, even though the percentage of nitrogen may be higher.

Recent experimental results indicate that best results indicate that best results with truck crops are secured when the fertilizer, lime, manure, and crop residues are plowed down. However, a small amount may be retained for side dressings during the growing season. Getting this material down to plow depth has a tendency to draw the roots down rather than to the surface and the plants are therefore better able to survive in dry seasons.

Tremendous interest in veg table gardens has developed and the serious food situation which is developing justifies any effort expended in this direction.

It would seem that commercial growers need have little fear of finding a market for his crops, particularly if he is near large centers of population. There will undoubtedly be considerable demands for vegetables for home canning. If marketing officials set "canning weeks", they could stimulate demand for this purpose and move any surplus which might accumulate.

Insecticides and Fungicides. The situation regarding such materials is more encouraging than was at first thought. Rotenone is short — the supply is about 1/4 of that used last year. Pyrethrum is none too plentiful but apparently the supply of nicotine sulfate will be ample.

Arsenicals will be 10-15 percent less than last year but copper fungicides are about equal to the 1942 supply. Cryolite will be 25 percent to 30 percent larger in supply than last year and should be used as far as possible instead of less plentiful insecticides.

Increasing numbers of seed dealers are treating seeds with appropriate materials for seed borne diseases. They should be in a better position to do this than the average grower.

Late Blight of Potato. Unusual losses of potatoes occurred last fall from attacks of this disease, some commercial growers who failed to spray losing practically their whole crop. This disease can be controlled by spraying and growers who did this last year saved their crop. The Dakota Red seems to be quite susceptible to the blight and for this reason is probably on the way out. The U. S. Department of Agriculture is cooperating with the potato growing states and testing out a great number of seedlings, many of which show decided resistance to this disease. It is a slow process, however, to get types resistant to the various diseases and at the same time have the desired eating and marketing characteristics. Distinct progress is being made and we may hope for a satisfactory late potato for the lower levels in the near future. Some unnamed seedlings have shown the ability to yield well even under rather dry conditions.

The elimination of spraying through the development of resistant varieties is a clear economic gain and investigations along this line are profitable, although often slow and at times discouraging.

Edible Soybeans. Interest is growing in this new food crop on the part of home gardeners. So much difficulty has been experienced in some quarters in getting satisfactory yields from lima beans that growers are switching over to the more productive soybeans. They do not seem to be attacked appreciably by the Mexican bean beetle, but are attacked by the Japanese beetle. Early plantings are damaged more severely than mid-season sowings. The beans may be shelled as green beans or allowed to mature. They are not easy to shell unless the pods are scalded in hot water. Commercially they can be handled fairly well in a pea viner. Their greatest importance probably lies in their use by commercial canners.

Rabbits seem to be very fond of the young plants and small plantings in the garden may be seriously damaged unless given adequate protection.

Several varieties are now listed by seedsmen and anyone interested in trying out this crop should send for Experiment Station Circular giving results of production and canning tests made at the University of Maryland.

The soybean ranks high in both protein and oil so that it makes one of the best substitutes for meat.

NEWS LETTER

Issued by
The Maryland Vegetable Growers Association.
W. R. Ballard,
Secretary - Treasurer.

Vol. XX. No. 3.

College Park, Maryland.

March, 1943

Resolution Adopted by Northeastern Vegetable and Potato Council

WHEREAS, the Office of Price Administration seems committed to the establishment of ceiling prices on perishable vegetables, regardless of the multiplicity of problems incidental to the perishable nature of the products and the many variances of costs of production and distribution from hundreds of different producing sections, all of which, in our opinion, make the application of price ceilings on perishables not only impossible but impracticable of administration; and

WHEREAS, we believe it to be to the best interests of consumers, both at war and on the home front, that production of vegetables be encouraged by the preservation of reasonable profits; and

WHEREAS, we believe it especially desirable, in view of the present transportation emergency existing throughout the country, to encourage production near consuming centers;

NOW, THEREFORE, BE IT RESOLVED, that the Northeastern Vegetable and Potato Council, in meeting assembled this thirteenth day of March, 1943, believes that price ceilings, if they must be set, should be established as close to the consumer as possible and not closer to the producer than the point of first wholesale distribution in the market of final consumption; that this group definitely opposes the establishment of any ceiling at country shipping points, this conclusion being based upon the following contentions:

(1) F.O.B. ceilings with full delivery costs to wholesale markets allowed above the ceiling become a subsidy of long distance transportation and many packaging expenses incidental to transportation;

(2) F.O.B. ceilings make possible many ceilings in any given wholesale market, varying in accordance with the many points of origin, thus creating a very confusing situation in all important wholesale markets;

(3) F.O.B. ceilings, on account of the confusion above set forth, greatly complicate the problem of administration and greatly increase the expense of such administration and wholesale distribution;

(4) F.O.B ceiling would be a definite disadvantage of all producers near consuming centers, inasmuch as they would force lower prices on nearby shipments than would be allowed on more distant shipments, thus denying to local growers the principal advantage which has enabled them to meet their normal competition. Such application of ceiling limits would be an arbitrary denial of the right of one grower to sell a product of equal food value at as good a price as another grower, who merely happened to be farther away from the market;

(5) The only legitimate purpose of a price ceiling is the limitation of the consuming cost of a given amount of food. It is, therefore, inconceivable that the office of Price Administration has a legal right to rule that one measure of any product can be sold at one time and place substantially higher than a like measure of the same product, simply because one measure traveled farther than the other;

(6) F.O.B. price ceilings, for the reasons above stated, are directly contrary to the government's stated need for encouragement of production near consuming centers, because of the present transportation emergency.

Committee on Vine Crops. Following out the instructions of the Horticultural Council at their annual meeting in Baltimore, January 13th, a committee of 14 growers, representing 6 counties, was recently granted a hearing by the Administrator of the Chemical Division, Fertilizer Section, in Washington, D. C.

An excellent case, based upon labor, rotation, food value, and adaptation to soil, was presented, but to date no action has been taken to remedy the situation complained of.

"The WPB has reported a scarcity of potash and superphosphate, but more nitrogen was to be available because of releases by the Army and Navy. The U.S.D.A. now working on fertilizer grade program for 1944, and any changes or recommendations should be immediately submitted to the various State Officers."

Vegetable Seed Treatment Tests, 1942. Investigators in 30 states and 2 Provinces in Canada report as follows on 1942 tests:

Peas. The present recommendations, in order of their preference, would be to use Spergon at 1.5 to 2 oz. per bushel, Semesan at 2.5 oz, or Red Cuprocid at 2.5 oz.

Lima Beans. Spergon at 2 oz. per bushel and Arasan at 1.2 oz. gave significant improvement in emergence with both Henderson Bush and Fordhook.

Spinach. Apparently zinc hydroxide, cuprous oxide or zinc oxide at a 2 percent dosage gave significant increases in emergence.

Sweet Corn. Semesan at 1.5 oz. per bushel is recommended as an inexpensive seed treatment.

Tomatoes. Apparently most stocks can be treated safely with hot water at from fifty-two to fifty-four degrees C.

Beets. Red Cuprocid at rate of 1.5 percent by weight gave good results as also did Semesan at 2.5 percent.

Cucumbers. 0.2 percent Cuprocid and 0.25 Semesan are effective.

Cabbage. Semesan at 0.42 percent was slightly more effective than zinc oxide at 2 percent.

NEWS LETTER

Issued by

The Maryland Vegetable Growers' Association
W. R. Ballard,
Secretary-Treasurer.

Vol. XX. No. 4.

College Park, Maryland.

April, 1943

Seed Stock Scarce. Commercial growers are having difficulty in securing seed stocks of certain vegetables. Part of this is due to crop failure, but some is due to seed dealers diverting large stocks to be sold as packaged goods. Some growers have had their orders for certain items cut as much as 50 to 75 percent.

Certified potato seed stock seems to be scarce. Victory gardeners are in the market and many will no doubt use table stock for seed purposes regardless of its suitability.

Edible soybeans are in great demand. There never was a very large supply of these beans so that there is little choice left. Apparently the variety to plant is the one you can find seed of. Rabbits are fond of soybeans and this is a pest difficult to control because of governmental restrictions. They are said to be much more abundant in suburban areas than in the open country. Snap beans are also limited in supply. Some of the canners are finding it difficult to secure adequate supplies for their growers.

"Guidance Committee." At a conference in Baltimore on February 24th, 1943 representatives of the Fruit and Vegetable Industry met to consider problems relating to the distribution of fresh fruits and vegetables under emergency war conditions.

After a thorough discussion of pertinent matters "a guidance committee" with F. Ridgely Todd as Chairman, and Russell C. Hawes as Secretary, was set up. This committee is to "serve as a lookout over the field of agricultural production and distribution, with particular relation to fruits and vegetables, in order to note and bring to the attention of the whole committee or to any interested group thereof, any development, either in the field of production or in the area of distribution, that might require especial attention or action. The committee is in a position to act quickly, calling conferences or taking such other action as would enable interested parties to act together for the best interests of the industry and of the war effort."

The committee desires to be notified of any development in the industry requiring especial attention or consideration. Here is an opportunity for growers to make use of machinery for getting quick action on problems relating to the industry.

Do You Have Tomato Wilt in Your Fields? The United States Department of Agriculture introduced in 1941 a new tomato, the Pan America, which is quite resistant to the Fusarium wilt. In tests it has yielded about with Marglobe, but not as heavily as Rutgers where wilt was not a factor. On wilt-infected soils, Pan America has been definitely superior to these other varieties. Where conditions suit it, this variety has heavy, solid fruits of good red color. It should

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Seed Stock Scarce. Commercial growers are having difficulty in securing seed stocks of certain vegetables. Part of this is due to crop failure, but some is due to seed dealers diverting large stocks to be sold as packaged goods. Some growers have had their orders for certain items cut as much as 50 to 75 per cent.

Certified potato seed stock seems to be scarce. Victory gardeners are in the market and many will no doubt use table stock for seed purposes regardless of its suitability.

Edible soybeans are in great demand. There never was a very large supply of these beans so that there is little choice left. Apparently the variety to plant is the one you can find seed of. Rabbits are fond of soybeans and this is a pest difficult to control because of governmental restrictions. They are said to be much more abundant in suburban areas than in the open country. Snap beans are also limited in supply. Some of the canners are finding it difficult to secure adequate supplies for their growers.

"Guidance Committee." At a conference in Baltimore on February 24th, 1943 representatives of the Fruit and Vegetable Industry met to consider problems relating to the distribution of fresh fruits and vegetables under emergency war conditions.

After a thorough discussion of pertinent matters "a guidance committee" with F. Ridgely Todd as Chairman, and Russell C. Hawes as Secretary, was set up. This committee is to "serve as a lookout over the field of agricultural production and distribution, with particular relation to fruits and vegetables, in order to note and bring to the attention of the whole committee or to any interested group thereof, any development, either in the field of production or in the area of distribution, that might require especial attention or action. The committee is in a position to act quickly, calling conferences or taking such other action as would enable interested parties to act together for the best interests of the industry and of the war effort."

The committee desires to be notified of any development in the industry requiring especial attention or consideration. Here is an opportunity for growers to make use of machinery for getting quick action on problems relating to the industry.

Do You Have Tomato Wilt in Your Fields? The United States Department of Agriculture introduced in 1941 a new tomato, the Pan America, which is quite resistant to the Fusarium wilt. In tests it has yielded about with Marglobe, but not as heavily as Rutgers where wilt was not a factor. On wilt-infected soils, Pan America has been definitely superior to these other varieties. Where conditions suit it, this variety has heavy, solid fruits of good red color. It should

be excellent for both market and for canning. Seed stock of this new variety is limited, but growers with wilt-infested soil would do well to test it out in a small way.

Changes in orders from Washington make it difficult for vegetable growers to plan for the season. Unfortunately decisions have to be made considerably ahead of the planting of crops, and plans cannot be changed over night to correspond to governmental edicts.

Growers will undoubtedly come through with as good a patriotic response as any other group. They have had a long experience bucking up against the vagaries of weather, uncertain competition from other areas, market gluts, and all the other vicissitudes which normally beset them, so they may be able to take in their stride these added interferences from Washington.

Growers who must depend upon large forces of seasonal laborers for harvesting will need large supplies of faith to believe that the labor will be available when needed. The package situation is another matter attended with plenty of uncertainties, to say nothing of transportation difficulties.

However, if the produce is grown there will undoubtedly be great efforts made to harvest it and to market, process, or store it.

The cold, wet, backward spring is wearing down some of the initial enthusiasm of inexperienced Victory Gardeners. It has been difficult to get ground plowed or dug and to prepare suitable seed beds for planting. Impatient gardeners have already set out tomato plants only to have them frozen down to the ground.

Despite the varied mistakes which will be made, Victory gardeners over the country will no doubt make a real contribution to the food supply of the Nation. Beside the experience which will have been gained, will be a greater understanding and appreciation of the part commercial growers play in our economy both now and under more normal conditions.

It should not be forgotten that many experienced gardeners will undoubtedly greatly enlarge the extent of their plantings and because of intensive culture will produce higher than the average yields.

Railroads are already over-taxed and demand will become increasingly heavier as the season advances. Recent scarcities of certain vegetables have produced a certain amount of hysteria and this will greatly stimulate home garden production.

NEWS LETTER

Issued by
The Maryland Vegetable Growers' Association
W. K. Ballard,
Secretary - Treasurer.

Vol. XX. No. 5.

College Park, Maryland.

May, 1943.

New Tomato Bulletin. The Delaware Experiment Station has just reprinted from the 1942 Transactions of the Peninsula Horticultural Society a report by E. P. Brasher, entitled "More Tomatoes For the War Effort". Some significant statements from this report are repeated herewith. The principal topic discussed is increasing the yield per acre rather than increasing the acreage. "Each year, regardless of weather conditions, certain farmers produce much larger yields than others. Sometimes the most successful growers produce four or five times the average annual Delaware yield." "Few vegetable crops respond as well to good soils and good cultural treatment as the tomato. Therefore, in selecting a field for this important crop the best soil on the farm should be chosen. The fertility level should be high and the organic content above one percent. The heavier soil types (provided they are well drained) will usually produce the largest yield, but when earliness is a prime factor, as in the case of producing market tomatoes, the sandy loam soils are considered ideal." "A study of Delaware soils showed the best yields to have been produced on soils with a Ph below 5.8, with medium rather than low magnesium content, with organic matter content above 1 percent, with high nitrogen content, with low minus to low phosphorous content, rather than low plus to medium phosphorus content, and with low plus medium potassium content rather than low minus to low potassium content. These are only one year results and are not considered conclusive."

"The condition of a tomato plant at transplanting time determines to a large extent its productiveness. It is important to set only good plants. These are plants that are dark green in color, fairly large, stocky, free from disease and in a vigorous growing condition at transplanting time. The author found that any treatment that resulted in stunting or hardening young tomato plants permanently slowed up their field performance and decreased their yield roughly in proportion to the severity of the hardening process. Likewise, plants that were grown under crowded conditions until they become spindly or the lower leaves become yellow were much less productive than stocky, vigorous plants. Whether the grower buys southern grown plants or produces them himself, they should be carefully graded and all spindly, diseased, and poorly colored plants discarded before transplanting operations start. Even though a grower may have to discard one-half of the plants he buys, it is still a paying proposition to transplant only good plants. Reducing tomato yields to a single plant basis we often find that a good plant will produce ten more pounds of tomatoes than a poor plant. Figuring the value of tomatoes at September, 1942 prices, a single poor plant that was set cost the farmer fifteen cents. This is a fabulous price to pay for a single plant. If many of these plants are set, the farmer's income is greatly diminished."

"Usually the largest yields and the highest quality fruit are attained from plants that are set soon after the danger of frost is over. In Kent and Sussex counties, Delaware, the optimum transplanting date probably falls sometime between May 5th and 10th. After this date, one ton per acre for each week's delay in transplanting."

"Experimental results from Delaware, Maryland, New York, and elsewhere indicate that the use of starter solutions will normally increase tomato yields from one to two tons per acre. In Maryland, Mahoney and Hunter found that certain starter solutions greatly increased the stand of plants in addition to increasing yields."

"In recent field trials we have been unable to find a better variety than Rutgers."

"In 1942 an experiment was conducted at Wyoming, Delaware, to determine the most desirable method of applying tomato fertilizer. From the data presented it is evident that there is an outstanding yield difference in favor of the fertilizer that was plowed down. This was: (1) 1200 pounds of a 4-8-8 plowed down four to six inches, compared with (2) 1200 pounds broadcast, (3) 1200 pounds of 0-8-0 in the row and 1200 pounds of 4-0-8 broadcast, (4) 1200 pounds of 0-8-0 in row and the same amount of 4-0-8 in bands, and (5) 900 pounds of 4-8-8 broadcast and 300 pounds of 4-8-8 in bands."

A Substitute for Carrots. Investigations at the University of Maryland by the Horticultural Department indicates that the Maryland Golden sweet potato is almost equal to carrots in the production of vitamin A. The comparison reads 100 for carrots and 94 for the Maryland Golden. There are several reasons why this is an important discovery. In the first place the sweet potato industry in Maryland is on a fairly large scale while carrot growing is not much of a commercial crop. Sweet potatoes are easier to grow on soils which suit the crop. Then again many consumers do not like carrots but might like sweet potatoes. At any rate the results of these tests should furnish a good talking point for boosting the sales of the Maryland Golden sweet potato.

Several other varieties tested were lower in vitamin A content, the lowest being Nancy Hall, a white potato. This vitamin seems to be tied up with the yellow color.

Dehydration Conference. A three-day conference of technicians and others was held at the University of Maryland May 12th to 14th for consideration of problems relating to this developing industry of dehydration. The immediate concern is to provide vegetables and fruits to the armed forces in the dried form to cut down on ship space in transportation. Some investigators, however, believe that this method of preserving food may have considerable commercial possibilities after the war emergency is over.

Topics under discussion included basic engineering principles of dehydration, design and operation of dehydrators, army requirements for dehydrated foods, preparation of raw materials, enzymes, suitability of materials for dehydration, temperature, humidity, and storage factors, reconstitution of dried material, packaging, and home dehydration.

On display were various items of equipment and dehydrated samples of a number of different products. The consensus seemed to be that distinct progress is being made in the development of the industry, but many problems are yet to be ironed out.

Marketing Service Russell C. Hawes, Marketing Specialist, with headquarters at 815 Fidelity Building, Baltimore, issues from time to time truck crop reports and other timely information which should be helpful to commercial producers of vegetables. If you are not getting these reports, you are missing a good bet. Much helpful material from the standpoint of the consumer is being put out by this office. It has undoubtedly helped in moving fruits and vegetables when the supply on the market has been high.

NEWS LETTER

Issued by
The Maryland Vegetable Growers' Association
W. R. Ballard,
Secretary - Treasurer.

Vol. XX. No. 6.

College Park, Maryland

June, 1943.

New Sources of Insecticide. (From the AIF NEWS) "A limited supply of yam bean seed will be available this season for manufacturers to process into a new insecticide of relatively non-poisonous class.

"Cornell University scientists have studied yam beans for two years for their insecticide possibilities; the findings recently were publicized widely. It was generally believed that commercial importance would not develop until after the war, when enough could be grown and processed. Now a substantial acreage has been found in Mexico, grown for food with no original thought of insecticide possibilities. Tests have been made and it is now planned to divert part of this year's bean crop to insecticide use and to increase future plantings.

"According to Professor Roy Hansberry of Cornell, the plant's tuber-like roots have been used for food throughout the world's tropical regions. Its seeds have long been used in such countries as a fish poison. In 1941 two Chinese scientists found they had insecticidal value.

"The Cornell research followed. It indicated that the effect was not primarily due to rotenone, of which only a fraction of a per cent could be found in the bean, but to some other substance. Processed and used in a dust mixture, this was effective against several types of insects.

"Professor Hansberry did his laboratory work on material sent from China. Very recent tests showed similar values in the bean from Mexico. The plant is an annual, producing a crop ready for harvest four to six months after planting and known in Mexico as 'jicama'. Though Chinese first used it on insects, botanists believe it originated in Central America."

Rabbits a Menace to Victory Gardens. The rabbit is a serious pest of gardens in many sections of the State. Apparently they are more abundant in suburban areas than in the open country where natural enemies abound. The game laws are such that shooting, poisoning or trapping are prohibited except during the open season, which is November 15th to December 31st. It is understood that the State pays a bounty of fifty cents per head if turned in alive to the Conservation Department. However, to trap them it is necessary to take out a trappers license. It is reported that these rabbits are taken to the open country and released so that hunters may have something to shoot at.

With the food situation as critical as it is, there would seem to be considerable justification for doing away with rabbits actually being found destroying vegetable crops.

The Future Looks Hopeful. Accumulations of nitrogen supplies have increased to the point where it appears that the situation with regard to crop needs will soon be greatly eased. This should be welcome news to those growers who have been seriously restricted in this item so far this season.

There is good news too from the seed supply front. The present prospects point to an overall increase in seed stocks for next year of about seven percent. Since this increase applies primarily to those having small seeds, the percentage of improvement in certain individual crops will be very high.

At the present time there is a noticeable scarcity of potato seed stock for the late crop. This is due partly to heavy losses last year from late blight, and partly to heavy demand on the part of Victory gardeners.

NEWS LETTER

Issued by

The Maryland Vegetable Growers' Association
W. R. Ballard,
Secretary - Treasurer.

Vol. XX. No. 7.

College Park, Maryland.

July, 1943

Tomato Diseases. The U. S. Department of Agriculture has just issued Farmers' Bulletin, No. 1934, TOMATO DISEASES, which is quite complete in descriptions and illustrations. Recommendations are given for the prevention and control of troubles affecting this crop. The author, S. P. Doolittle, Senior Pathologist, of the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, discusses such topics as: Importance of Tomato Diseases; Diseases Caused by Bacteria and Fungi; Virus Diseases; Diseases Caused by Insects and Nematodes; Nonparasitic Diseases; Diseases of Undetermined Origin; Methods of Disease Control, and Identification of Tomato Diseases.

"The prevention of diseases in the seedbed is particularly important, since losses from disease are likely to be much less severe if disease-free tomato plants can be set in the field. When clean seed is protected by chemical treatment and planted in clean soil, a crop of healthy seedlings usually results. These practices, combined with rotation of the crop, clean culture, and the proper use of sprays and dusts, are the best safeguards against loss from disease."

New Order on Fertilizer. The new order regarding delivery and use of fertilizer is effective as of July 1st, 1943. The point of interest to most growers is undoubtedly the formulae allowed for use in Maryland. These are as follows: 0-12-13; 0-14-7; 2-12-6; 2-12-12; 3-9-12; 3-12-6; 4-8-12; 4-12-4; 4-12-8; 5-10-5; 5-10-10; 6-8-6; 7-7-7; and 10-6-4.

The 5-10-5 is designated as the Victory Garden fertilizer. Dealers having the 3-8-7 in packaged form will be allowed to sell stock in hand.

A New Potato. The U. S. Department of Agriculture has just issued Circular No. 665 describing a new potato which has been named Pawnee. This potato "has been under observation and test at Greeley, Colorado for seven years, during which time it has produced tubers of better appearance than the leading commercial varieties grown in the district, and generally it has matured before time for a killing frost. The tests made in cooperation with the Bureau of Home Economics, U. S. Department of Agriculture, showed that the cooking quality of Pawnee grown at the Colorado Potato Experiment Station is good. In this respect it compared favorably with Triumph, Rural New Yorker No. 2, and Katahdin, the leading commercial varieties grown in the Greeley District."

Maine grown Pawnee was almost equal to Green Mountain in cooking quality, almost identical with Irish Cobbler, and significantly better than Triumph.

"The tubers are smooth, short elliptical to roundish, and have very few eyes, which are shallow. The variety consistently produces a very high percentage of No. 1 tubers with relatively tough skin, a characteristic that gives it an advantage over Rural New Yorker No. 2 and Triumph, two of the leading commercial varieties in the Greeley district."

The Pawnee matures soon after Irish Cobbler and Triumph and is said to be a good keeper. Trials in other states have been limited, but results have been favorable. Dr. Jehle has this variety in his Maryland test plots and will be able to report shortly on its performance. It may turn out to be a competitor of Irish Cobbler as an early variety. It is a cross between Rural New Yorker No. 2 and Katahdin.

Dry Weather. Crops have suffered considerably in some parts of the State recently because of lack of rain. At College Park a .7 inch rain occurred about June 15th. No appreciable precipitation occurred after this date until July 10th and this amounted to only .35 inches. Local sections have had more rains lately.

Because of dry conditions many reports of curled leaves and blossom end rot of tomatoes have been received. Hot dry conditions in some sections have affected the set of fruit of tomatoes and beans. Victory Gardeners have had their difficulties, especially where artificial watering has not been feasible. However, these new gardens have undoubtedly added materially to the supply of available food crops.

It will be very helpful in plantings of late crops, if rains arrive in time to soak up the ground soon.

In some sections the Mexican bean beetles have been rather scarce with an ample supply in others. The Japanese beetle is known to feed to a considerable extent on soybeans but they have been observed this year feeding on string beans.

A short time ago it was difficult to find potatoes on the market but now that the early crop is in, government authorities are urging consumers to buy on the market and save their home raised stock for later use. This is in order to move supplies of this more or less perishable product on the market.

Victory gardeners who planted late potatoes very early are now beginning to wonder why, with a luxuriant development of top growth, they do not find big, well-developed tubers in the ground. In World War I many gardeners tried the old variety McCormick early with the same indifferent success. Here is where experience is a valuable element in successful gardening.

NEWS LETTER

Issued by

The Maryland Vegetable Growers' Association
W. R. Ballard,
Secretary - Treasurer

Vol. XX. No. 8.

College Park, Maryland

August, 1943.

Tomatoes by Direct Seeding. The Extension Service, Purdue University, has printed a leaflet under the title above which describes the method and lists the pros and cons for this system. Some of the advantages of direct seeding as given by tomato growers are: (1) Generally lower cost per acre; (2) less trouble with disease; (3) deeper tap root system; (4) saves long transportation (which is detrimental to plants); (5) generally better stands; (6) quite often higher yield; (7) the grower is not dependent upon others to grow and transplant plants; (8) seeding before corn planting time; (9) the tomatoes crack less in wet weather; (10) plants stand dry weather better; (11) the vines seem to hold their leaves longer and are freer of blight, as is usually the case with late-set fields; (12) a. helps a canner spread his planting peak and also canning peak; b. helps the grower spread his picking peak, if he has also used some set plants; c. the canner has part of his acreage planted, thereby reducing the rush at plant-setting time; (13) fresh plants can be taken from direct seeding for replants to the same field if replanting is necessary; (14) very desirable source of plants for setting late field, or replanting; and (15) saves hauling of plants and planters from factory.

Some of the disadvantages listed are: (1) difficulty of getting plants up; (2) competition of weeds; (3) the work of blocking out the plants; (4) lack of seeding equipment to properly place both seeds and fertilizer; (5) lack of experience on part of growers; (6) discouragement of growers because plants are only one or two inches high at the time six to ten inch transplants are being set out; (7) necessity of thinning plants at proper time; and (8) not suitable for soils of poor fertility or hard clay soils.

Seed is drilled $1/2$ to $3/4$ inch deep and about 1 inch apart, using from $3/4$ to 1 pound of high germination seed per acre. Seeding is done between April 25 and May 10. One method is to fasten 2 garden seeders behind a corn planter which distributes the fertilizer in a single band. The fertilizer is placed 3 to 5 inches deep. Plants are thinned by cross cultivation with a corn cultivator, then finished with hand hoe. An experienced Indiana canner says, "Have patience and faith in direct seeding and you will be handsomely rewarded. Do not worry if you do not get a stand until June 1. Seed will remain in the ground six weeks and still come up when moisture is sufficient".

Fertilizers and Their Uses in Maryland. The Departments of Agronomy and Horticulture have prepared a printed sheet giving the fertilizer materials and mixed fertilizer grades permitted for use in Maryland by the War Food Administration. F P 05, Rev. It is suggested that growers purchase the fertilizer for their needs as soon as possible.

Fertilizer grades and pounds per acre are tabulated for various crops and for the various soil types prevailing in the State. This is a useful guide and every grower should have a copy.

A New Greens. One of the leading seedsmen will introduce next year a new greens which seems to have some promise. It might be called an "educated" pig weed.

(Amaranthus) which is slow running up to seed. The leaves and stems are tender and in the garden they may be picked off and new shoots appear. Cooked it has no disagreeable taste and it would probably appeal to most eaters as desirable. It has long been used in China, but seems to be new to American growers.

One distinct advantage it will have, if it catches people's fancy, is that it does well in hot weather - most of our important crops of greens requiring cool weather for their best development. Commercial growers should try this out on a small scale to determine its possibilities in Maryland.

Dry Weather. According to reports, as of August 5, from county agents, dry weather has caused serious damage in most parts of the State. Cecil and Garrett counties, and parts of Kent, Harford, Baltimore, Washington, Allegany, and Carroll counties have had a fairly satisfactory season, but in other parts of Maryland, the situation has been serious.

Reports from the counties indicate that the yield of snap beans has been cut from 20% to 75%, lima beans 10% to 75%, tomatoes from 10% to 65%, and sweet corn from 10% to 65%. Somerset reports potatoes cut 50% in yield.

The longer the drouth continues the more serious will be the effect on yields, and the more difficult it will be to get in the late crops. Without rains the late planted vegetables will be established with difficulty and prospects of yields would be greatly reduced.

It has been a discouraging year for victory gardens, although many gardens have been satisfactorily productive. Those who have been able to water artificially or where gardens have been located on low ground, which retained the moisture, have fared best. Fine crops of tomatoes have been seen in a number of gardens.

Considerable produce from the gardens have been canned. Because of the large number of gardens the total production will be a real contribution to the overall food supply. Had the rainfall been more nearly normal, the yields would have been much larger. One result will be a greater appreciation of the handicaps which the farmer is up against in his business.

Greenhouse Crops. Because of the war several of the florists have given some thought to converting to the production of vegetables. Under normal conditions, the growing of flowers has been so much more productive than vegetables that little attention has been devoted to greenhouse vegetables in this State.

In recent years the competition from winter grown vegetables in the southern and southwestern states has made the venture even less promising. Among the types forced, tomatoes have on the whole been most profitable. While the demand has not been extensive, they have been preferred as a rule to the southern green wraps.

Generally two crops are raised during the winter season, the first maturing for the holiday trade and later, while the second crop started previously in pots coming into production in the spring. It would seem that under the present emergency conditions some of the florists might grow this crop to advantage. While not as profitable as flowers, it would enable them to keep their plants in condition so that it would be easy to swing back to flowers after the war.

In considering lettuce as a greenhouse crop, inquiry revealed that there was only one section in the country (around Boston) where it had proved a profitable venture.

Some few growers have done fairly well with cucumbers, but the number of crops which have promise in this section is strictly limited.

NEWS-LETTER

The Maryland Vegetable Growers' Association
W. R. Ballard
Secretary - Treasurer

Vol. XX. No. 9.

College Park, Maryland

September, 1943

Nitrogen. It appears that much of the nitrogen available for use in 1944 will be in the form of ammonium nitrate, a high powered fertilizer containing 35 percent nitrogen. With almost twice as much nitrogen as contained in nitrate of soda, the application of small amounts as top dressing is somewhat complicated. Another disadvantage has been with the early forms that water is taken up readily thus it resulted in the clogging up of distributors.

An interesting report from Washington State describes a simple method of applying this material in liquid form. The method consists of using a metal drum (or other container) for the liquid to which is attached a short section of rubber hose leading to an 8 to 12 foot, 1 inch to $1\frac{1}{2}$ inch iron pipe distributor with $1/16$ inch holes drilled 6 inches apart. This spreader should be $2\frac{1}{2}$ to 3 feet below container.

One hundred pounds of ammonium nitrate, dissolved and diluted with water to 25 gallons and applied with this simple apparatus will apply 16 pounds of nitrogen per acre, when moving at 8 miles per hour.

Changing the size of the holes, or varying the speed, makes it possible to apply any desired amount to a given area.

Rapid progress is being made to improve the form of the ammonium nitrate and it is quite likely that by spring many of the difficulties of handling in the dry state will have been eliminated.

It looks now as though all the nitrogen needed for next year's crops will be available.

A New Yellow Tomato. A new yellow tomato, the Jubilee, seems to be a real addition to the list of tomato varieties at least for the home garden. Unlike most yellow tomatoes the fruits are meaty comparing favorably with standard red sorts as Marglobe or Rutgers. Fruits are large and smooth. The flavor though mild is not flat. The rich orange colored juice is attractive and may appeal to the public taste. The plants are vigorous, somewhat light green in color, and productive. It is yet to be determined whether the Jubilee will make headway as a commercial or canning variety but its merit would seem to warrant a fair trial in this direction.

Sweet Potato Storage. The War Food Administration has placed in the hands of the County U.S.D.A. War Boards and the Extension Services plans for sweet potato storage. This publication discusses conversion of buildings, "On Farm" Applications "Off Farm" applications, Approved Designs and Construction Materials, including insulation, foundation and floors, walls and roofs, partitions, electrical, and heating. Plans and bills of materials are included for 500 bushel capacity, 4000 bushel capacity, and 20,000 bushel capacity.

Applications for material will be cleared quickly, provided questions are fully answered and the required number of copies submitted. Application blanks are available at U.S.D.A. War Boards or War Production Board Field Offices.

The plans for storage construction have been worked out in cooperation with the Agricultural Engineering Division, Bureau of Plant Industry, with the assistance of Extension Agricultural Engineers from Georgia, Louisiana, and Maryland for the purpose of providing efficient storage designs in popular capacities using minimum amounts of critical material.

Edible Soybeans . Edible varieties are slowly making headway as an important food crop. The beans are highly nutritious because of the high content of proteins and oil. The crop is surer and more productive than Lima beans, and in some quarters is taking the place of this crop. While not affected appreciably by the Mexican bean beetle, the soybeans are attacked by the Japanese beetle, and are also quite susceptible of injury from rabbits.

A number of varieties are on the market but this year the supply of seed of some sorts was quite limited. There is considerable variation in the different varieties regarding size, vigor, and productiveness of plants. Size of beans and quality vary also. Some gardeners are trying them out with varying degrees of success. Some canners are using them to some extent and will probably enlarge their operations as the public taste is cultivated. One drawback from the standpoint of the home gardener is that they are hard to shell. If the pods are first blanched, the beans can be squeezed out more readily.

Bansei, Willomi, Toku, and Hokkaido were the highest yielders in Maryland tests in 1940. Emperor scored highest in canning quality. Other varieties in the test were Giant Green, Jogun, Higan and Sousei. Funk's Delicious is a large seeded sort grown and liked by some of the home gardeners.

With the scarcity of meat, the soybean may come in for more attention as a substitute protein food. Some people like the soybean while others will need to acquire a liking.

NEWS-LETTER

Issued by

The Maryland Vegetable Growers' Association

W. R. Ballard, Secretary-Treasurer

Vol. XX. No. 10.

College Park, Maryland

October, 1943.

INSECTICIDE AND FUNGICIDE SUPPLIES. "The War Food Administration is vitally interested in promoting the production of larger and better crops to supply the Armed Forces, the civilian population, and the essential needs of liberated peoples. Consequently, from the viewpoint of national interest as well as from economic considerations, the war agencies, particularly the War Food Administration, recognize a responsibility to the individual farmer in assuring him supplies of insecticides and fungicides to protect his crops against insect infestations.

In general, adequate facilities are available in the United States to produce all the insecticides and fungicides needed for domestic purposes. Production, however, will depend upon whether supplies of raw materials are sufficient and are delivered in accordance with desired seasonal production schedules. Stocks of certain generally-used insecticides such as rotenone and pyrethrum, which must be imported, will not be sufficient to meet all demands. By controlling and limiting their use and by the appropriate utilization of extenders and substitutes, we should be able to protect the important food crops from serious injury, whether on a commercial or on a small-garden scale. It is generally recognized that when an insect infestation or disease infection becomes evident it is then too late to start the manufacture of materials, hence production and distribution must be accomplished before the actual need.

The outlook for the more important insecticides and fungicides is as follows:"

Rotenone.

South America is expanding production of cube. In Peru plantings in 1942 amounted to 3,000 acres, and 1943 acreages are expected to be over 4,000 acres. Exports to the United States should increase if shipping is available. Present indications point to an importation of 4.5 to 5 million pounds crude and powdered root from South America in 1944, in contrast to a little over one million pounds in 1943. This increase, however, will have to take the place of considerable pyrethrum used last season.

In the revised Rotenone Order FPO - .3, the permitted uses will probably include the following items of interest to vegetable growers: peas for the pea weevil and pea aphid; cole crops for cabbage worms, aphids, flea beetles, and harlequin bugs; beans for bean beetles; asparagus for asparagus beetles on market shoots; sweet corn for European corn borer; cucurbits for squash bugs, beetles, and vine borers. In addition, rotenone insecticides may be used on vegetables and small fruits in the farm, home, community, and Victory gardens to control any insect or mite.

It is expected that approximately one million pounds of 5 percent rotenone powder will be made available to manufacture small size packages for use by farm, home, community, and Victory Gardeners. The maximum rotenone content permitted in finished dusts for this use is 0.5 percent. Dusts manufactured for use on commercial crops will be made available to farm, home, community, and Victory Gardeners.

cial crops where a certificate of use is required may contain as high as 0.75 per cent rotenone.

Pyrethrum. Because of reduced crop production in East Africa, due to economic and climatic conditions, the supply of pyrethrum will be wholly inadequate, and it will be necessary for agriculture to use substitutes wherever they may be at all effective. A large part of the supply will be requisitioned for the armed forces, the estimated 1,300,000 pounds available for agricultural use for insects, controlled satisfactorily only by pyrethrum, is to be compared with the 12,925,000 pounds estimated as the normal use in 1941.

Nicotine. In the year ending July 31, 1943, nicotine production amounted to 4,426,000 pounds of 40 percent nicotine sulfate as compared with the normal production of between 2 and 2.5 million pounds, an increase approaching 75 percent. This increased supply is urgently needed as an alternate for rotenone in the control of aphids, and some other insect pests that are small and soft-bodied. Certain new mixtures containing nicotine show promise in the control of the European corn borer in sweet corn.

Arsenic. As a consequence of hot, dry weather which prevented heavy cotton-insect infestations, a considerable carry-over of calcium arsenate resulted. Supplies of lead arsenate were tight throughout 1943, and the industry recommended an increase in output for 1944. The estimated requirement for 1944 is 75,000,000 pounds as compared with 65,000,000 for the past season.

Requirements of other arsenicals include 4,000,000 pounds, Paris green, 1,350,000 pounds London purple, and 2,686,000 pounds of miscellaneous arsenicals. The estimated requirements are close to the maximum quantity that can be produced with present facilities.

Cryolite. Facilities for the production of natural cryolite of a grade suitable for insecticidal use have expanded to provide about 18,000,000 pounds for 1944. Facilities for manufacturing synthetic cryolite will permit a production much greater than the 5,000,000 pounds made in 1943. Cryolite is being increasingly used for control of Mexican bean beetle before the pods form, and as a partial substitute for rotenone and pyrethrum on cabbage, cucurbits, and lettuce.

Sulfur. Supplies are adequate.

Copper Sulfate. The capacity of the conner industry is adequate to produce the estimated requirements of 117,207,500 pounds of copper fungicides, although supplies of scrap may not be sufficient to meet these requirements in addition to military, industrial, and export purposes.

Mercury. The estimated need of 353,000 pounds for insecticides and fungicides can be made available.

Victory Garden Needs. It appears that there will be available in small size packages of insecticides and fungicides containing lead arsenate, cryolite, nicotine, synthetic materials and sulfur and copper compounds.

NEWS LETTER

Issued by

The Maryland Vegetable Growers' Association
W. R. Ballard
Secretary-Treasurer

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POINTERS FOR MARYLAND POTATO GROWERS

by

R.A. JEHLE, STATE PLANT PATHOLOGIST

The Seed Potato Situation

In anticipation of a seed potato shortage in 1944 many States have established another grade of potatoes in addition to certified seed. This will be known as "war emergency seed". The various states are permitted to establish their own standards for this seed but they must be approved by the U. S. Department of Agriculture.

Maryland potato growers are urgently advised to avoid planting "war emergency seed", if there is any possibility of obtaining certified seed. If war emergency seed is planted, poor yields must be expected since much more disease is permitted in war emergency seed than in certified seed. Potato growers are especially warned not to plant war emergency seed from states which have any ring rot tolerance. Ring Rot is a serious disease of potatoes which can be spread by the cutting knife and severe losses from tuber rot may result from planting diseased seed. Information regarding the tolerance of ring rot in war emergency seed can be obtained from R. A. Jehle, State Plant Pathologist, University of Maryland.

There is a limited supply of Maryland certified seed available. In Worcester and Somerset Counties seed of the Irish Cobbler and Dakota Red varieties is eligible for certification, and in Garrett County seed of the Potomac, Sequoia, Sebago, Smooth and Russet Rural varieties is eligible. Maryland certified seed has always given as good or better results than seed from other sources, and Maryland potato growers are advised to plant Maryland certified seed in preference to certified seed from other states, if they can get it. Owing to the limited supply of certified seed, orders should be placed early.

Suitable potato varieties for planting in Maryland are:

<u>Early</u>	<u>Medium</u>	<u>Late above 1000 feet elev.</u>	<u>Late planting below 1000 feet elev.</u>
Irish Cobbler	Chippewa	Potomac	Dakota Red for table stock & seed
Mesaba	Katahdin	Sequoia	Potomac for table stock & seed
Warba	Earlaine #2	Rural (Smooth or	Sequoia for table stock & seed
Triumph	Pontiac	Russet)	Sebago for table stock & seed
Earlaine		Sebago	Pontiac for table stock & seed
			Katahdin for table stock & seed
			Earlaine #2 for table stock & seed
			Irish Cobbler for seed only.

The Potomac Potato

This new potato, a cross between Rural New Yorker and Katahdin, was recently released by the Maryland Experiment Station in cooperation with the U. S. D. A.

It is a high yielding, late, round, white potato resistant to late blight and to injury from flea beetles and leaf hoppers. The tubers are much more resistant to late blight rot than Sequoia tubers and it is an excellent baking potato.

A small amount of Potomac seed is available in Garrett County.

Spraying

The value of thorough spraying cannot be over emphasized. For three consecutive years, yield tests on sprayed and unsprayed fields on the same type of land with the same seed and fertilizers have been made in Garrett County. Increases of from 50 to 200 bushels per acre were obtained with 8 to 10 applications of Bordeaux mixture.

Future possibilities for potato production in Maryland

Potato yields in Maryland could be easily increased 50 to 100 per cent by the use of better seed, more and better spraying and better cultural practices. One of the first requisites for such increases in yield is the establishment of a permanent and reliable source of vigorous disease-free seed suitable for planting fields which are to be planted for table stock, as well as those which are to be entered for certification. Garrett County has been endowed by nature with a climate suitable for the establishment of such a source of seed potatoes. For the past twelve years experiments and demonstrations have been conducted in Maryland which have definitely established the fact that vigorous disease-free seed stocks can be permanently maintained in Garrett County and that seed potatoes grown in Garrett County give just as good or better yields than seed potatoes grown in the northern states and Canada.

In order to bring about the production of an adequate supply of vigorous disease-free seed stock in Garrett County, the growers of such seed stock must be assured of a market for their seed. On the other hand, potato growers in other parts of Maryland cannot depend upon Garrett County as a seed source unless they are assured of an adequate supply of vigorous disease-free seed stock in Garrett County. The entire potato industry of Maryland would profit by an arrangement between Garrett County potato growers and potato growers in other parts of the state which would make possible the production of enough Maryland certified seed to plant the entire Maryland potato crop, thereby increasing the yield, improving the quality and decreasing the production cost of Maryland potatoes.

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NEWS-LETTER

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The Annual Meeting

The principal questions agitating growers at this time are, "What will it cost to produce vegetables?", and, "What price can be expected for our produce?". It appears certain that the Government plans to put ceiling prices on all important vegetable crops. As a matter of protection, and as an aid to authorities in Washington, growers need to compile specific data on the cost of production of the various vegetables, emphasizing regional differences. If this is not done, decisions made may work a hardship on certain localities. As far as possible, this information should be in the hands of official boards before decisions become final. Undoubtedly, public hearings will be held, where problems may be thrashed out. There is great need for better organization of commodity groups to assemble the necessary data and to put it into proper form for presenting to officials.

The program for the annual meeting, has been set up primarily as a basis of discussing these timely and disquieting questions. It is highly desirable to get as many as possible of the growers out to the meeting. The members can do a good job urging the influential growers to attend. After all, these problems are of vital concern to every commercial grower, and it is up to him to look after his own business.

The Vegetable Growers' Association is now dependent almost entirely upon membership dues for funds, so that prompt payment by members will be appreciated. We are regularly obligated to the extent of \$20.00 to the Farm Bureau, and \$10.00 to the Northeastern Vegetable and Potato Conference, besides postage and other expenses.